

**BIOLOGICAL RESOURCES REPORT
FOR THE
FALLBROOK 21-ACRE PROPERTY
TPM 20976
ENVIRONMENTAL LOG # 05-02-007
SAN DIEGO COUNTY, CALIFORNIA**



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ENVIRONMENTAL SERVICES

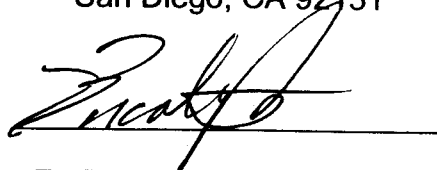
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Summary of Findings

A residential has been proposed on a 21-acre parcel in the unincorporated community of Fallbrook in northern San Diego County. The property is located approximately one-half mile south of East Mission Road, west of interstate 15 and is accessible via Ranger Road. The proposed project involves the subdivision of the property into five residential lots ranging in size from 4.0 to 4.53 acres.

A general biological survey was conducted by Tierra Environmental Services on April 6, 2006. Ten vegetation communities were detected on-site, including coastal freshwater marsh, southern willow scrub, disturbed southern willow scrub, mule-fat scrub, coast live oak woodland, disturbed coast live oak woodland, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, southern willow scrub, and non-native grassland. Agricultural areas, ornamental areas, disturbed habitat, developed areas, and a man-made pond also occur within the property.

Direct impacts, including on and offsite, resulting from the proposed project would include 0.49 acre of coast live oak woodland, 0.35 acre of Diegan coastal sage scrub, 1.09 acres of southern mixed chaparral, 2.01 acres of non-native grassland, 0.58 acre of man-made pond, 0.15 acre of disturbed habitat, 1.79 acres of ornamental areas, 11.41 acres of agricultural areas, and 2.20 acres of developed areas for a total of 20.07 acres of impacts. The entire property is located outside of the County of San Diego Multiple Species Conservation Program.

Impacts to Diegan coastal sage scrub total less than one acre. Furthermore, coastal California gnatcatcher was not detected nor is it expected to occur on-site due to the lack of suitable coastal sage scrub habitat. Impacts to Diegan coastal sage scrub on-site would not preclude the design or prevent the preparation of a subregional NCCP reserve system. Therefore, the proposed project meets the requirements of a De Minimis Exemption and may be exempt from a Habitat Loss Permit.

Mitigation for impacts to 0.49 acre of coast live woodland would require in-kind mitigation at a 3:1 ratio. Mitigation can be accomplished through the preservation of 1.47 acres of coast live oak woodland within a County approved mitigation bank. Impacts to Diegan coastal sage scrub can be accomplished by preserving 0.35 acre of Diegan coastal sage scrub within a County-approved mitigation bank. Proposed mitigation would ensure no net loss of Diegan coastal sage scrub habitat thereby reducing the proposed impacts to less than significant. Impacts to 1.09 acres of southern mixed chaparral and 2.01 acres on non-native grassland would require mitigation at a 0.5:1 ratio. Mitigation for impacts to southern mixed chaparral and non-native grassland can be accomplished through the preservation of 0.55 acre and 1.01 acres of southern mixed chaparral and non-native grassland, respectively, within a County-approved mitigation bank. Proposed mitigation would reduce impacts to sensitive habitats to less than significant.

Red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), and western bluebird (*Sialia mexicana*) were detected on-site. The County has divided sensitive species into groups based on their rarity and known threats. Wildlife species are divided into Groups I and II on the County Sensitive Animal List. Group I species include those that have a very high level of sensitivity. Group II animals include those species that are becoming less common. Turkey vulture and red-shouldered hawk are Group I wildlife species and western bluebird is a Group II species. The majority of the property supports agricultural areas, non-native grassland, and ornamental areas. Areas of native habitat occurring within the property are small and only provide marginal habitat. Thus, the potential for occurrence of federally or state listed species on-site is considered low. Non-native grassland occurring on-site provides foraging habitat for raptors. However, more expansive areas of foraging habitat occur off-site.

With the exception of introduced bird species, all migratory birds on-site and their nests would be protected by the Migratory Bird Treaty Act. Therefore, project activities resulting in potentially direct or indirect impacts to migratory birds would be restricted during the breeding season for migratory birds (approximately February to September). In the event that construction activities occur within the breeding season, a nesting bird survey would be required. The nesting survey would be conducted prior to commencement of project activities occurring within the migratory bird breeding season. In the event that nesting birds are detected within the study area, construction activities would be restricted until after the breeding season.

1.0 INTRODUCTION

A residential subdivision has been proposed on a 21-acre parcel in the unincorporated community of Fallbrook in northern San Diego County. The property is located approximately one-half a mile south of East Mission Road, west of Interstate 15 and is accessible via Ranger Road (Figures 1 and 2). The proposed project involves the subdivision of the property into five residential lots ranging in size from 4.0 to 4.53 acres.

A general biological survey was conducted to identify and map existing vegetation communities, identify biological resources, determine the presence or absence of sensitive species, and to assess the potential impacts of the proposed project on these resources. This report provides an assessment of existing biological resources occurring on-site.

2.0 METHODS AND SURVEY LIMITATIONS

A general biological survey was conducted by E. Alfaro of Tierra Environmental Services on April 6, 2006 between the hours of 1100 and 1345. Weather conditions experienced during the survey consisted air temperature of 65° F, approximately 15% cloud cover, and 0 to 2 mile per hour winds. The survey was conducted during a time of year when many springs annuals are present.

Prior to the survey, a search was conducted of the California Natural Diversity Data Base (CNDDB; CDFG 2006) a computerized inventory of endangered, threatened, or rare species occurrences maintained by the California Department of Fish and Game (CDFG). The potential occurrence of reported species was assessed during the field survey and is addressed in this report. All surveys were conducted pursuant to the California Environmental Quality Act (CEQA) and in consistency with the Natural Communities Conservation Plan (NCCP).

Nomenclature used in this report conforms to Simpson and Rebman (2001) and Hickman (1993) for vegetation; Holland (1986) for vegetation communities; Sibley (2000) for birds; Jameson and Peeters (1988) for mammals; and Behler and King (1979) for reptiles and amphibians.

3.0 PHYSICAL SETTING

3.1 Physiography

The project area consists of several hills, two roughly north-south trending drainages, and a man-made pond. Developed portions of the property include four structures, consisting of two houses, a shed, and a barn, and paved and unpaved roads. The majority of undeveloped portions of the property support active agriculture. The eastern

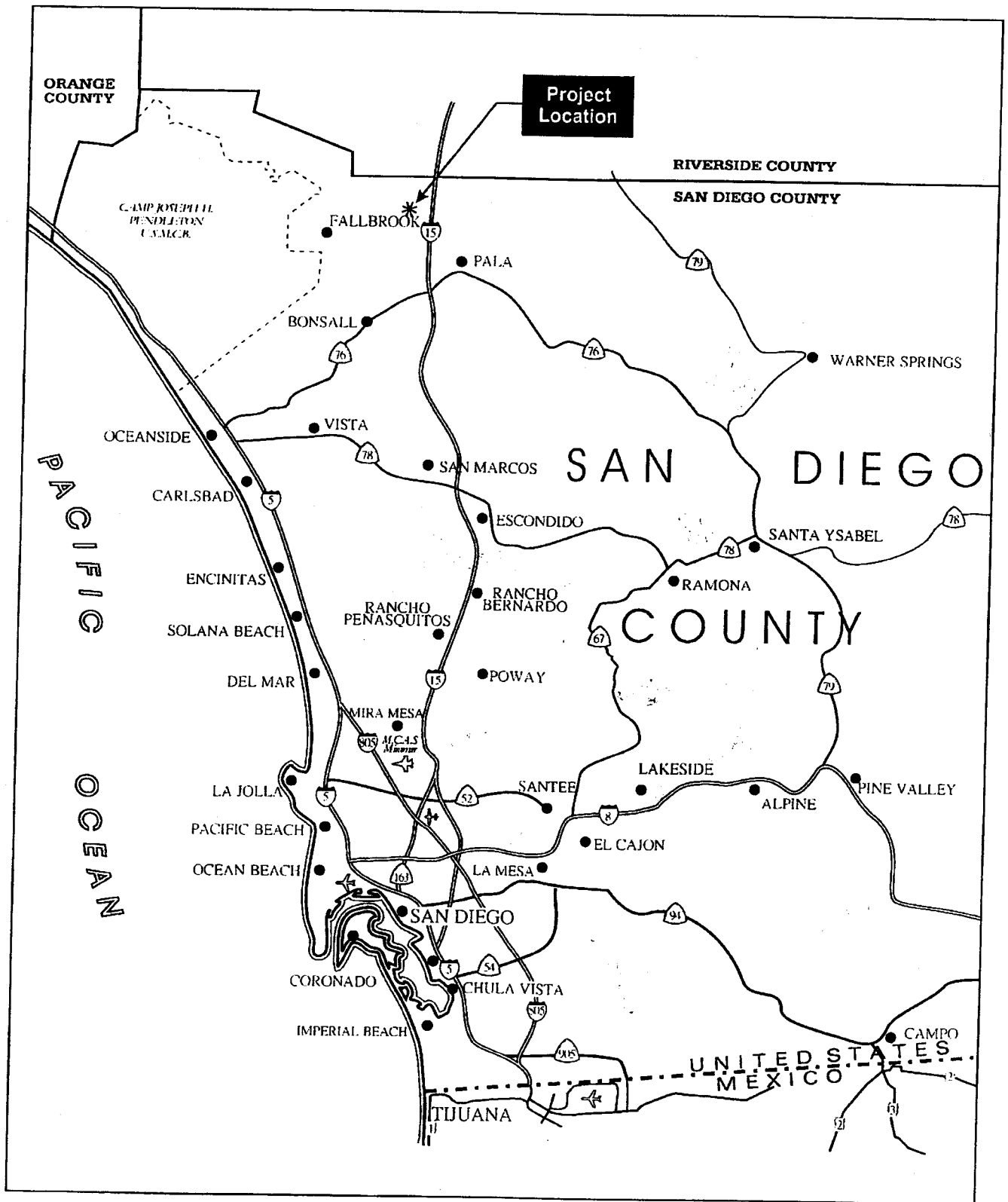


Figure 1
Regional Location Map





drainage supported upland habitats contained no water at the time of the survey. Its banks ranged from 5 feet (ft.) to 10 ft. in depth and 15 to 20 ft. in width. The banks of the second drainage ranged from 1 to 2 ft. in width and 1 to 2 ft. in depth. At the time of the survey, this drainage was mostly un-vegetated, although the northernmost portion of this drainage supported a wetland habitat and ponded water with a depth of less than one foot (figure 3). The majority of the property is used for agriculture include avocado (*Avocado* sp.) and orange (*Citrus* sp.) groves and dragon fruit (*Hylocereus undatus*) cultivation.

3.2 Soils

Four soils occur on-site, including soils in the Cieneba series, Ramona series, steep gullied lands, and stony lands (Bowman 1973). Soils in the Cieneba series consist of excessively drained, very shallow to shallow, coarse sandy loams. These soils formed in material weathered in place from granitic rock. They occur on rolling to mountainous uplands on slopes of 5 to 75 percent. Cieneba coarse, sandy loam, typically occurring on 30 to 65 percent eroded slopes (C1G2), is reported from the project area. These soils are known to occur on steep to very steep areas (Bowman 1973)

Soils in the Ramona series consist of well-drained, very deep sandy loams that have a sandy, clay loam subsoil. These soils formed in granitic alluvium. They occur on terraces and alluvial fans on slopes of 0 to 30 percent. Ramona sandy loam, typically occurring on 5 to 9 percent slopes (RaC), is reported from the project area. These soils occur on moderately sloping terraces and alluvial fans (Bowman 1973)

Steep gullied land (StG) consists of strongly sloping to steep areas that are actively eroding into old alluvium or decomposed rock. It occurs as large individual gullies or as a network of many gullies in areas where the vegetative cover is sparse or has been severely depleted by grazing or fires. On-site, this soil type occurs in association with both drainages (Bowman 1973)

Stony land (SvE) occurs at the base of cliffs or below steep rocky slopes. These areas are very sloping to very steep. The material consists of many stones, boulders, and cobblestones, and some finer material (Bowman 1973)

4.0 RESULTS

4.1 Botany

Ten vegetation communities were detected on-site, including coastal freshwater marsh, southern willow scrub, disturbed southern willow scrub, mule-fat scrub, coast live oak woodland, disturbed coast live oak woodland, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, southern mixed chaparral, and non-native grassland. Disturbed habitat, agricultural areas, ornamental areas, developed areas, and a man-made pond also occur within the property (Figure 3). A complete list of all plant species detected on-site is included in Appendix A.

Coastal freshwater marsh is dominated by perennial, emergent monocots 4 meters (m) to 5 m tall, often forming completely closed canopies (Holland 1986). Plant species characteristic of this community include willow sedge (*Carex lanuginosa*), yellow nutsedge (*Cyperus esculentus*), spike sedges (*Eleocharis* spp.), cattails (*Typha* spp.), and viscid bulrush (*Scirpus acutus*). On-site, coastal freshwater marsh is composed of southern cattail (*Typha domingensis*), annual beard grass (*Polypogon monspeliensis*), and mouse-ear chickweed (*Cerastium glomeratum*). Coastal freshwater marsh occurs downslope of an area on non-native grassland in the northwestern portion of the property (Figure 3).

Southern willow scrub, as described by Holland (1986), is characterized by dense, broad-leaved, winter deciduous riparian thickets, dominated by several willow species (*Salix* spp.), scattered Fremont's cottonwood (*Populus fremontii*), and western sycamore (*Platanus racemosa*). Plants species detected in southern willow scrub on-site included arroyo willow (*Salix lasiolepis*) and blue elderberry (*Sambucus mexicana*). Southern willow scrub on-site occurs in the northwestern portion of the property (Figure 3).

The abundance of non-native species is the characteristic that distinguishes disturbed southern willow scrub from undisturbed southern willow scrub. Plant species observed on-site included arroyo willow, tree tobacco (*Nicotiana glauca*), and century plant (*Agave americana*). Disturbed southern willow scrub occurs south of the pond along the southern property boundary (Figure 3).

Mule-fat scrub, according to Holland (1986), is a depauperate, tall herbaceous riparian scrub strongly dominated by mule-fat (*Baccharis salicifolia*). This early seral community is maintained by frequent flooding. Other plant species characteristics of this habitat include Barbara sedge (*Carex barbara*), and willow species (*Salix* spp.). Mule-fat was the only plant species detected in mule-fat scrub on-site. Mule-fat scrub occurs at the northern property boundary in the northwestern portion of the property (Figure 3).

Coast live oak woodland has only one dominant tree species, coast live oak (*Quercus agrifolia* var. *agrifolia*), which is evergreen and reaches 10-25 meters in height (Holland 1986). The shrub layer is poorly developed, but may include toyon (*Heteromeles arbutifolia*), gooseberry (*Ribes* spp.), laurel sumac (*Malosma laurina*), or blue elderberry (Holland 1986). The herb component is usually continuous and dominated by ripgut grass (*Bromus diandrus*) and several other introduced taxa. On-site, plant species included coast live oak, toyon, and greater periwinkle (*Vinca major*). Coast live oak woodland occurs along the eastern property boundary in the northern portion of the property (Figure 3).

The abundance of non-native tree species is the characteristic that distinguishes disturbed coast live oak woodland from undisturbed coast live oak woodland. Plant

species observed on-site included coast live oak, Peruvian pepper tree (*Schinus molle*), and olive (*Olea europaea*). Disturbed coast live oak woodland is associated with undisturbed coast live oak woodland along the eastern property boundary (Figure 3).

Diegan coastal sage scrub is characterized by low, soft to woody subshrubs that are most active in winter and early spring (Holland 1986). This vegetation community is typically dominated by coastal sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), together with laurel sumac (*Malosma laurina*) and white sage (*Salvia apiana*). Plant species detected in Diegan coastal sage scrub on-site included coastal sagebrush, black sage (*Salvia mellifera*), coast monkey flower (*Mimulus aurantiacus*), lemonadeberry (*Rhus integrifolia*), laurel sumac, sawtooth goldenbush (*Hazardia squarrosa*), needlegrass (*Nassella* sp.), and tree tobacco. Diegan coastal sage scrub mostly occurs along the western and northwestern property boundaries (Figure 3).

The sparse distribution of typically dominant shrub species and the abundance of non-native plant species are the characteristics that distinguish disturbed Diegan coastal sage scrub from undisturbed Diegan coastal sage scrub. Plant species detected on-site included coastal sagebrush, ripgut grass, foxtail chess (*Bromus madritensis*), lemonadeberry, laurel sumac, fennel (*Foeniculum vulgare*), century plant, and short-pod mustard (*Hirschfeldia incana*). Disturbed Diegan coastal sage scrub occurs along the western and southern property boundaries (Figure 3).

According to Holland (1986), southern mixed chaparral consists of broad-leaved sclerophyll shrubs, 2-4 meters tall, forming dense, often impenetrable vegetation dominated by scrub oak (*Quercus dumosa*), chamise (*Adenostoma fasciculatum*) and any one of several taxa of manzanita (*Arctostaphylos* sp.), and lilac (*Ceanothus* sp.). Dominant plant species detected on-site included toyon, lemonadeberry, and laurel sumac. Although chamise, a main component of southern mixed chaparral was not detected, the height and structure of this habitat justified its classification as southern mixed chaparral. Southern mixed chaparral occurs along the eastern property boundary and adjacent to the pond (Figure 3).

Non-native grassland has a dense to sparse cover of annual grasses with flowering culms 0.2-0.5 meters high. Germination occurs with the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring (Holland 1986). On-site, plant species included ripgut grass, foxtail chess, sweet alyssum (*Lobularia maritima*), deerweed (*Lotus scoparius*), short-pod mustard, camissonia (*Camissonia robusta*), slender pectocarya (*Pectocarya linearis*), and false mustard (*Camissonia californica*). Non-native grassland occurs in the north-central portion of the property and upslope from coastal freshwater marsh in the northwestern portion of the site (Figure 3).

Disturbed habitat describes areas that have been strongly disturbed in the past and are now dominated by non-native herbaceous plants. Plant species detected in disturbed habitat included dwarf nettle (*Urtica urens*), ripgut grass, Russian thistle (*Salsola*

tragus), cheeseweed (*Malva parviflora*), and wild oat (*Avena fatua*). Disturbed habitat occurs in the northwestern and southern portions of the property (Figure 3).

Agricultural areas supported avocado groves, orange groves, and areas of cultivated dragon fruit. Agricultural areas occur throughout the majority of the property (Figure 3).

Ornamental describes areas that have been landscaped by the property owner and support non-native, cultivated vegetation. Plant species observed on-site included oleander (*Nerium oleander*), coral tree (*Erythrina* sp.), Mexican fan palm (*Washingtonia robusta*), Peruvian pepper tree, and scarlet pimpernel

(*Anagallis arvensis*). Ornamental areas on-site occur mostly in the northeastern portion of the site in association with existing homes (Figure 3).

4.2 Wildlife

This section discusses wildlife species that were observed on-site. Wildlife species were detected with binoculars or by unaided visual observation. A complete list of all wildlife species observed is included in Appendix B.

Bird species observed included red-shouldered hawk (*Buteo lineatus*), Nuttall's woodpecker (*Picoides nuttallii*), northern rough-wing swallow (*Stelgidopteryx serripennis*), house wren (*Troglodytes aedon*), western bluebird (*Sialia mexicana*), California thrasher (*Toxostoma redivivum*), and hooded oriole (*Icterus cucullatus*). Turkey vulture (*Cathartes aura*) and red-tailed hawk (*Buteo jamaicensis*) were observed flying overhead. Reptiles observed included side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*). Audubon's cottontail (*Sylvilagus audubonii*) and California ground squirrel (*Spermophilus beecheyi*) were the only mammal species observed.

4.3 Rare and/or Endangered or Sensitive Species

Plant and animal species are considered sensitive if they have been listed as such by federal or state resource agencies, or by special interest groups such as the California Native Plant Society (CNPS). The California Department of Fish and Game (CDFG) publishes the CNDDB RareFind, a computerized inventory of information on the location and condition of California's rare, threatened, endangered, and sensitive plants, animals, and natural communities (CDFG 2006). The CNDDB reported the potential occurrence on-site for federally and state endangered least Bell's vireo (*Vireo bellii pusillus*).

Furthermore, red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), and western bluebird (*Sialia mexicana*) were detected on-site (Figure 3). The County has divided sensitive species into groups based on their rarity and known threats. Wildlife species are divided into Groups I and II on the County Sensitive Animal List. Group I species include those that have a very high level of sensitivity. Group II animals

include those species that are becoming less common. Turkey vulture and red-shouldered hawk are Group I wildlife species and western bluebird is a Group II species. The ecology and occurrence of sensitive species potentially occurring or detected on-site is summarized in Table 1.

Least Bell's Vireo

Federal Status: Endangered

State Status: Endangered

The least Bell's vireo (*Vireo bellii pusillus*) is a small, olive-gray songbird that nests and forages almost exclusively in riparian woodland habitats. Nesting habitat typically consists of riparian woodland with well-developed overstories, understories and low densities of aquatic and herbaceous cover. The understory often consists of dense thickets composed of narrow-leaved willow (*Salix exigua*), mule-fat, and saplings of arroyo willow, Goodding's black willow (*Salix gooddingii*) or one of several possible herbaceous species.

The survey was conducted during a time of year when this species would not be expected to be present in San Diego County. However, southern willow scrub occurring on-site does not provide appropriate habitat for this species. On-site, this vegetation community is composed of a few arroyo willow saplings. The structure of southern willow scrub on-site is unsuitable for nesting least Bell's vireo. Southern willow scrub occurring adjacent to the property is very dense and occurs in a narrow drainage lacking suitable foraging areas. Thus, least Bell's vireo is not expected to occur on-site.

TABLE 1. THREATENED, ENDANGERED OR RARE SPECIES POTENTIALLY OCCURRING ON THE FALLBROOK 21-ACRE PROPERTY

Species	Status ¹	Habitat ²	Presence/Description
least Bell's vireo (<i>Vireo bellii pusillus</i>)	federally endangered; state endangered	Dense willow woodland/scrub.	Not detected nor expected on-site. Southern willow scrub does not provide appropriate habitat.
turkey vulture (<i>Cathartes aura</i>)	County Group I species	Dry open country, woodlands, and farmlands.	Detected overhead within the project area. <u>May forage on-site. Nesting habitat does not occur on-site.</u>
red-shouldered hawk (<i>Buteo lineatus</i>)	County Group I species	Eucalyptus groves, riparian habitats, and montane coniferous woodland.	Detected in coast live oak woodland on-site. <u>May use site for foraging. Mature trees on-site could provide nesting habitat.</u>

western bluebird (<i>Sialia mexicana</i>)	County Group II species	Montane coniferous and oak woodlands, rarely in riparian woodlands, recently colonizing urban areas with mature trees and wide lawns.	Detected foraging in agricultural areas. <u>Project site provides appropriate foraging and nesting habitat.</u>
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¹ Status taken from California Department of Fish and Game (2007)

² Habitat taken from Ehrlich (1988) and Unitt (1984) for birds

4.4 Sensitive Habitats

Sensitive habitats include those communities considered unique because they host many species of plants and animals that are rare or substantially depleted. In the project area, sensitive habitats include coastal freshwater marsh, southern willow scrub, disturbed southern willow scrub, mule-fat scrub, coast live oak woodland, disturbed coast live oak woodland, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, southern mixed chaparral, and non-native grassland.

According to the County of San Diego Resource Protection Ordinance (RPO;1991) wetlands are defined as all lands that are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface of where the land is covered by water. All lands having one or more of the following attributes are "wetlands":

- At least periodically, the land supports predominantly hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained hydric soil or;
- The substratum is nonsoil and is saturated with water or covered by water at some time during the growing season of each year.

A roughly south-trending drainage occurs along the western portion of the property. This drainage consists of a narrow incised channel. At the time of the survey, this drainage was mostly unvegetated and did not support any nonsoils. Although coastal freshwater marsh occurs along the northernmost portion of the drainage, which supports ponded water, the drainage in its entirety does not meet the definition of an RPO wetland. Coastal freshwater marsh occurring in association with the northernmost portion of the above-mentioned drainage, in less than one foot of ponded water, would be considered a wetland habitat by the Army Corps of Engineers (ACOE). This agency uses three indicators of wetlands when making wetland determinations. Hydrophytic vegetation, as well as wetland soils and hydrology must be present to indicate ACOE wetland habitat. Mule-fat scrub, southern willow scrub, and disturbed southern willow scrub occurring on-site would not be considered wetland habitats by the ACOE as they do not support wetland soils or exhibit signs of hydrology. These wetlands appear to have become established by ponding of water resulting from alteration of natural

contours for creating and maintaining existing roads. However, coastal freshwater marsh, southern willow scrub, disturbed southern willow scrub, and mule-fat scrub would be considered wetland habitats by the CDFG and the County, as these habitats meet the RPO wetland definition.

Another drainage occurs along the eastern boundary of the property. This drainage support upland vegetation and does not support undrained hydric soils, or a nonsoil substratum. Thus, this drainage would not be considered a wetland habitat by the ACOE, CDFG, or County.

5.0 EVALUATION OF RESOURCES

As described previously, the majority of the property supports agricultural areas, non-native grassland, and developed areas. Coastal freshwater marsh, southern willow scrub, disturbed southern willow scrub, and mule-fat scrub on-site consist of small, isolated patches of wetland habitat that are not contiguous with other wetland habitats. Currently, southern willow scrub is composed of a few willow saplings. Disturbed southern willow scrub occurs as an isolated patch supporting non-native tree species. Coastal freshwater marsh and mule-fat scrub consist of isolated stands of southern cattail and mule-fat, respectively. Mule-fat scrub occurs adjacent to southern willow scrub located off-site. Coastal freshwater marsh, southern willow scrub, disturbed southern willow scrub, and mule-fat scrub are currently of low ecological value. It appears that the establishment of southern willow scrub, disturbed southern willow scrub, and mule-fat scrub was facilitated by ponding of water resulting from the alteration of natural contours for the installation of roads. All wetland habitats on-site are considered to have low function and values as there is no connectivity between wetlands, they are of low ecological value, and do not function as wildlife corridors.

Coast live oak woodland occurs in association with the eastern drainage, which functions as a wildlife corridor, and is contiguous with Diegan coastal sage scrub of low to moderate ecological value. Areas of coast live oak woodland provide habitat for several wildlife species and nesting sites for bird species. Although small in size, this habitat is of moderate ecological value. Coast live oak woodland is contiguous with disturbed coast live oak woodland. Disturbed coast live oak woodland is of low to moderate ecological value.

In general, Diegan coastal sage scrub is typically considered to have high ecological value. This vegetation community provides potential habitat for the coastal California gnatcatcher (*Poliioptila californica californica*) as well as a variety of wildlife species. Portions of Diegan coastal sage scrub on-site are remnants of larger areas of coastal sage scrub that were once contiguous with Diegan coastal sage scrub occurring off-site. Nonetheless, Diegan coastal sage scrub on-site provides habitat for several wildlife species. Thus, Diegan coastal sage scrub on-site is considered to be of moderate ecological value.

Disturbed Diegan coastal sage scrub within the property consists of small patches occurring adjacent to roads and agricultural areas. Although non-native plants are abundant and native shrubs sparse, this area provides habitat for small vertebrates. Thus, disturbed Diegan coastal sage scrub is of low to moderate ecological value.

Although southern mixed chaparral on-site has low plant diversity, it provides habitat for wildlife species. Southern mixed chaparral occurring along the eastern property boundary could be utilized by wildlife species as a wildlife corridor. However, the northern portion of this corridor does not connect to areas of native habitat (Figure 3). Southern mixed chaparral on-site is of moderate ecological value.

Non-native grassland occurs on the northeastern portion of the site. Previously, this area supported an orange grove. However, prior to being used for agriculture, this area undoubtedly supported Diegan coastal sage scrub. This area currently supports non-native grasses and native annual plant species which provide appropriate habitat for small vertebrates and foraging habitat for raptors. Non-native grassland is considered to be of low to moderate ecological value.

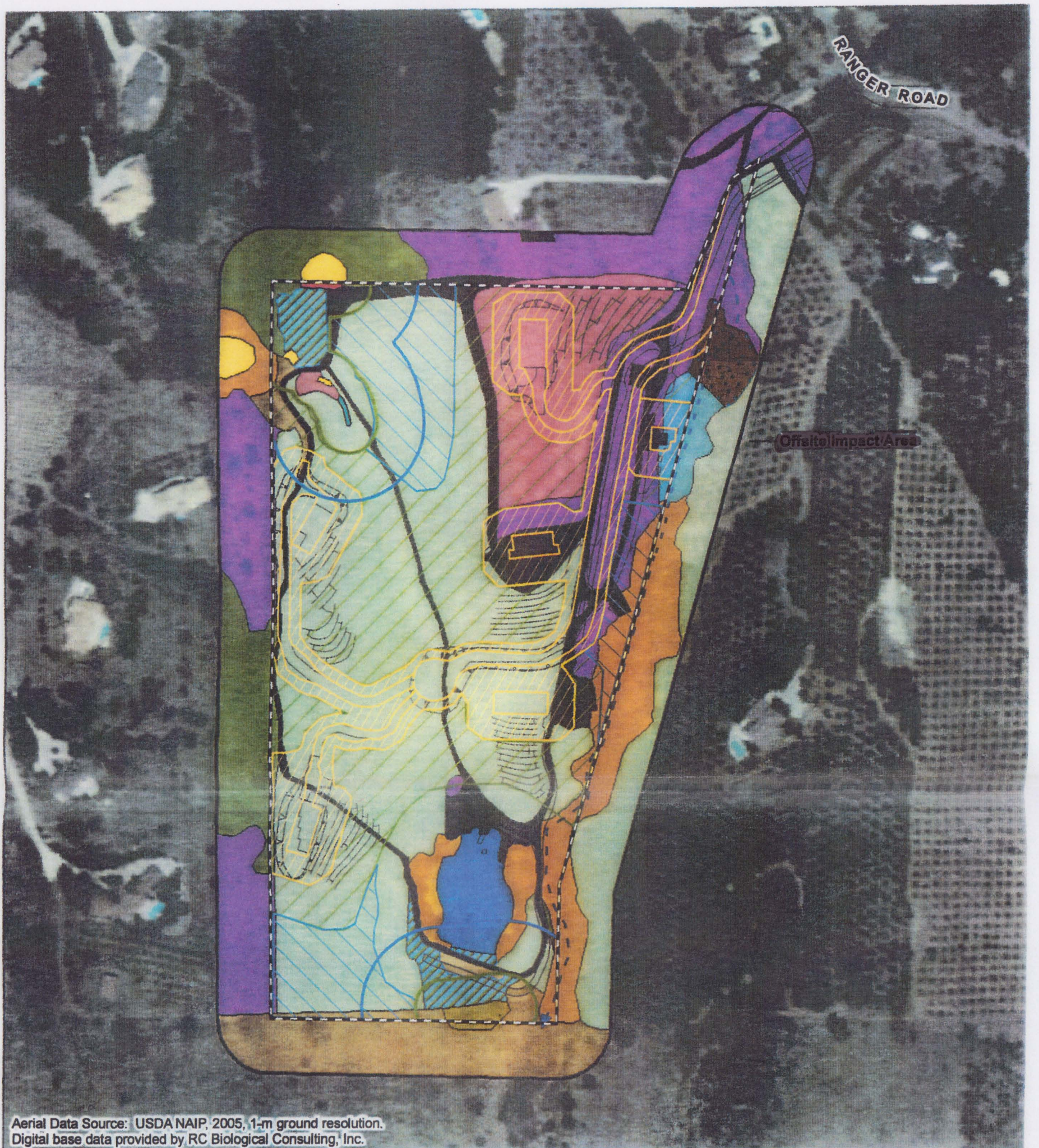
6.0 ANTICIPATED PROJECT IMPACTS

For the purposes of determining impacts and mitigation, the County of San Diego does not differentiate between disturbed coast live oak woodland, disturbed southern willow scrub, or disturbed Diegan coastal sage scrub, and undisturbed coast live oak woodland, southern willow scrub, and Diegan coastal sage scrub. Therefore, disturbed coast live oak woodland, disturbed southern willow scrub, and disturbed Diegan coastal sage scrub occurring on-site will be referred to hereafter as coast live oak woodland, southern willow scrub, and Diegan coastal sage scrub, respectively.



























The proposed residential subdivision would result in direct impacts to the vegetation communities of the property. Direct impacts associated with the proposed project would result from grading for four residential pads and driveways, an access road and cul-de-sac, leach fields, and fire buffers. Further, impacts resulting from the fire buffer would extend outside of the project area to the east, per the fire protection plan developed by RC Biological Consultants. Areas not directly impacted by the proposed project are considered to be indirectly impacted unless they are located within an open space easement. Since the open space easement is required for compliance with the RPO, the on-site open space is considered "impact neutral" and does not count either as an impact or as mitigation. Total impacts, including direct and indirect impacts on and offsite, resulting from the proposed project would include 0.49 acre of coast live oak woodland, 0.35 acre of Diegan coastal sage scrub, 1.09 acres of southern mixed chaparral, 2.01 acres of non-native grassland, 0.58 acre of man-made pond, 0.15 acre of disturbed habitat, 1.79 acres of ornamental areas, 11.41 acres of agricultural areas, and 2.20 acres of developed areas for a total of 20.07 acres of impacts (Table 2, Figure 4).

TABLE 2. PROPOSED PROJECT IMPACTS

Vegetation Community	Existing Conditions (acres)	Proposed Impacts (acres)	Biological Open Space Easement (acres)
ONSITE			
Coast live oak woodland	0.27	0.27	0.0
Diegan Coastal sage scrub	0.56	0.35	0.21
Southern mixed chaparral	1.09	1.08	0.01
Non-native grassland	2.06	2.01	0.05
Southern willow scrub	0.11	0.0	0.11
Mule-fat scrub	0.02	0.0	0.02
Coastal Freshwater marsh	0.01	0.0	0.01
Pond	0.58	0.58	0.0
Disturbed Habitat	0.59	0.15	0.44
Ornamental Areas	1.79	1.79	0.0
Agriculture	11.60	11.25	0.35
Developed Areas	2.34	2.20	0.14
Total onsite impacts	21.02	19.68	1.34



Aerial Data Source: USDA NAIP, 2005, 1-m ground resolution.
Digital base data provided by RC Biological Consulting, Inc.

VEGETATION		ACREAGE* Impact		
CLASSIFICATION		Existing	Onsite/Offsite	Avoided
	Agriculture	11.60	11.25	0.35
	Coast Live Oak Woodland (71160)	0.20	0.20	0.00
	Disturbed Coast Live Oak Woodland (71160)	0.07	0.07	0.00
	Diegan Coastal Sage Scrub (32500)	0.15	0.09	0.06
	Disturbed Diegan Coastal Sage Scrub (32500)	0.41	0.26	0.15
	Southern Mixed Chaparral (37120)	1.09	1.08	0.01
	Southern Willow Scrub (63320)	0.02	<0.01	0.02
	Disturbed Southern Willow Scrub (63320)	0.09	<0.01	0.09
	Coastal Freshwater Marsh (52410)	0.01	N/A	0.01
	Mule-Fat Scrub (63310)	0.02	<0.01	0.02
	Non-Native Grassland (42200)	2.06	2.01	0.05
	Pond	0.58	0.58	0.00
	Developed Areas	2.34	2.20	0.14
	Disturbed Habitat	0.59	0.15	0.44
	Ornamental Areas	1.79	1.79	0.00
TOTAL:		21.02	19.68	1.34
OTHER FEATURES		NOTES		
 Fule Management Zones		<p>Vegetation polygons were delineated using aerial photography and these boundaries should be considered approximate. Vegetation mapping is shown to 100 ft beyond property boundary, however acreage table reflects acreage within Project boundary only except where indicated as offsite. *Acreages <0.01 are not included in totals.</p>		
 Zone A				
 Zone B				
 Zone C				
 Offsite Fire Clearing				
				
	Property Boundary			
	Project Footprint/Preliminary Grading			
	Biological Open Space Easement			
	Limited Building Zone			
	Drainage			

Fallbrook 21- Acres
Biological Resources Impacts
and Open Space Easement Areas
FIGURE 4



0 100 200 400
SCALE IN FEET

DATE: 09/18/08
FILE NAME: FALLBROOK_FIGURE4_11x17.mxd
Graphic produced by Foothill Associates, GIS Division
© 2008



6.1 **Sensitive Species**

Three County birds were detected on-site (Figure 3). Turkey vulture and red shouldered hawk, both County Group I species, were detected on-site, overhead and in coast live oak woodland, respectively. Western bluebird, a County Group II species, was detected on-site in agricultural areas. Areas of coast live oak woodland and ornamental areas with mature trees provide nesting habitat for red-shouldered hawk. Areas of non-native grassland provide appropriate foraging habitat for red-shouldered hawk and other raptor species; however, more expensive areas of foraging habitat occur off-site. Turkey vulture is an opportunistic scavenger whose foraging habits are not restricted to specific habitats. Nesting habitat for turkey vulture does not occur on-site. Western bluebird is known to nest in montane coniferous and oak woodlands; however, this species shows signs of increasing its range in San Diego County. Western bluebird nests have been detected in eucalyptus trees and under roof tiles. In the desert, they are known to winter in agricultural areas. Thus, the project area provides appropriate foraging habitat and may provide appropriate nesting habitat for western bluebird. The majority of the property supports agricultural areas, non-native grassland, and ornamental areas.

In addition to the state and federal Endangered Species Acts that protect sensitive wildlife, the Migratory Bird Treaty Act (MBTA; 1918) protects nesting migratory bird species. This federal statute prohibits, unless permitted by regulations, the pursuit, hunting, taking, capture, killing, possession, sale, purchase, transport or export on any migratory bird or any part, nest or egg of that bird. With the exception of introduced bird species, all migratory birds on-site and their nests, would be protected by the MBTA. Therefore, project activities resulting in the removal of trees providing nesting habitat, including trees in agricultural and ornamental areas, and/or increased noise levels would be restricted during the breeding season for migratory birds (approximately February to September).

6.2 **Sensitive Habitats**

Sensitive Upland Habitat

The proposed project would result in direct impacts to 0.49 acre of coast live oak woodland, 0.35 acre of Diegan coastal sage scrub, 1.09 acres of southern mixed chaparral, and 2.01 acres of non-native grassland, all of which are considered sensitive upland habitats by the County. Impacts to these habitats are considered significant but mitigable. The entire property is located outside of the County's MSCP. In order to comply with the Endangered Species Act, the project must either obtain a Habitat Loss Permit or concurrence from the wildlife agencies that the project is exempt from the Habitat Loss Permit Ordinance. The following Observations of Diegan coastal sage scrub on-site may be relevant to the Habitat Loss Permit findings.

The Natural Communities Conservation Program (NCCP) was established in 1991 by state law with the intent of coordinating state-wide conservation of coastal sage scrub

habitat. According to the NCCP Logic Flowchart, the project area supports Diegan coastal sage scrub defined as having "low potential value for long-term conservation" (Flowchart is presented in Appendix C). Thus, development with adequate mitigation is allowed. The majority of Diegan coastal sage scrub occurring on-site consists of small areas of remnant habitat that was once contiguous with more expansive areas of Diegan coastal sage scrub. Thus, the proposed project would not interfere with the preservation of high quality habitat. Furthermore, according to the Draft North County Subarea Plan MSCP map (SanGIS 2004), the project area has been mapped as "Existing Agriculture" and is not proposed for preservation. This draft map also shows upland habitats occurring along the eastern boundary as an open space easement (SanGIS 2004).

It is not anticipated that Diegan coastal sage scrub on-site would support coastal California gnatcatcher. Diegan coastal sage scrub on-site occurs as remnant patches of Diegan coastal sage scrub that are contiguous with Diegan coastal sage scrub occurring off-site. Furthermore, no listed species occur, or are expected to occur, on-site and, thus, none would be impacted by the proposed project. Therefore, impacts to Diegan coastal sage scrub would not reduce the likelihood of survival and recovery of listed species.

Sensitive Wetland Habitats

The proposed project would not result in impacts to any sensitive wetland habitats and is therefore in compliance with the RPO. Currently, wetlands on-site have no wetland buffers and occur adjacent, or in close proximity, to developed areas and, thus, the values of these wetlands have been compromised. A 50-foot wetland buffer would be provided for southern willow scrub, coastal freshwater marsh, and mule-fat scrub, upon project completion (Figure 4). The proposed 50-foot wetland buffer is considered adequate for the protection and of the environmental and functional value of these wetlands habitats as they are of low ecological value. These wetland habitats are isolated from other wetlands and do not function as a wildlife corridors. Wetland habitats and corresponding wetlands buffers would be placed within an open space easement. Chain link fencing and signage along the boundaries of the open space easement has been proposed in order to avoid impacts to this area.

Prior to issuance of grading permits the applicant shall Grant to the County of San Diego a Limited Building Zone Easement as shown in Figure 4 . The purpose of this easement is to prohibit the construction or placement of any structure designed or intended for occupancy by humans or animals.

7.0 MITIGATION

7.1 Sensitive Species

With the exception of introduced bird species, all migratory birds on-site and their nests would be protected by the MBTA. Therefore, project activities resulting in potentially

direct or indirect impacts to migratory birds, such as removal of trees or increased noise levels, would be restricted during the breeding season for migratory birds (approximately February to September). In the event that construction activities occur within the breeding season, a nesting bird survey would be required in order to avoid direct impacts from grubbing of vegetation or indirect impacts from increased noise levels from construction. The nesting survey would be conducted prior to commencement of project activities occurring within the migratory bird breeding season. Nesting bird surveys would include the entire project area as well as native habitat located within 300 ft. of the project boundary.

Nesting bird surveys would be conducted no more than one week prior to the scheduled start date for project activities impacting native habitat. In the event that nesting birds are detected within the study area, construction activities would be restricted until after the breeding season.

7.2 Sensitive Habitats

Impacts to Diegan coastal sage scrub would require in-kind mitigation at a 1:1 ratio. Mitigation for impacts to Diegan coastal sage scrub can be accomplished by preserving 0.09 acre of Diegan coastal sage scrub within a County-approved mitigation bank. Proposed mitigation would ensure no net loss of Diegan coastal sage scrub habitat thereby reducing the proposed impacts to less than significant.

It should be noted that impacts to Diegan coastal sage scrub total less than one acre. Furthermore, coastal California gnatcatcher was not detected nor is it expected to occur on-site due to the lack of suitable coastal sage scrub habitat. Impacts to Diegan coastal sage scrub on-site would not preclude the design or prevent the preparation of a subregional NCCP reserve system. Therefore, the proposed project meets the requirements of a De Minimis Exemption and may be exempt from a Habitat Loss Permit.

Mitigation for impacts to coast live oak woodland, Diegan coastal sage scrub, southern mixed chaparral, and non-native grassland shall be accomplished through preservation of these habitats at the ratios listed in Table 3. On-site, the area currently supporting non-native grassland previously supported an orange grove. Because these areas were not replanted, non-native grasses became established. However, prior to being used for agriculture, lands on-site undoubtedly supported coastal sage scrub. Remnants of this habitat still occur on-site. Thus, mitigation for impacts to areas currently supporting non-native grassland should be accomplished by preserving Diegan coastal sage scrub. Off-site mitigation must occur within a County approved mitigation bank or at an off-site location approved by the County. If off-site mitigation is located outside of an approved mitigation bank, a Resource Management Plan (RMP) for the habitat must be submitted and approved by the Director of the Department of Planning and Land Use. An open space easement over the acquired habitat must be dedicated to the County of San Diego prior to or immediately following the approval of

the RMP. Mitigation for this project would be accomplished through the purchase of mitigation credits at the Daley Ranch Mitigation Bank.

The City of Escondido owns and manages the Daley Ranch Conservation Bank. The State of California Department of Fish & Game and the U.S. Fish & Wildlife Service have approved the Daley Ranch Conservation Bank's Credits for either in-kind or out-of-kind mitigation for public and private development projects within western San Diego County. Within the Conservation Bank there are 2,842 Conservation Credits approved for use as mitigation of five categories of species and habitat, including chaparral and unoccupied coastal sage scrub, coast live oak woodland, Engelmann oak woodland, non-native grassland (only for development projects within the city of Escondido). Purchase of credits includes the management and restoration expenses.

The entire project site is located outside of the San Diego County MSCP subarea plan. Impacts to coast live oak woodland would require in-kind mitigation at a 3:1 ratio. Southern mixed chaparral and non-native grassland would require mitigation at a 0.5:1 ratio. Mitigation for these impacts can be accomplished by purchasing mitigation credits at the Daley Ranch Mitigation Bank. Mitigation for impacts to upland habitats would reduce impacts to these habitats to less than significant.

TABLE 3. PROPOSED IMPACTS AND MITIGATION

Habitat	Proposed Impacts (acres)	Mitigation Ratio (acres)	Proposed Mitigation (acres)
ONSITE			
Coast live oak woodland	0.27	3:1	0.81
Diegan coastal sage scrub	0.35	1:1	1.36*
Southern mixed chaparral	1.08	0.5:1	0.54
Non-native grassland	2.01	0.5:1	0.0
Southern willow scrub	0.0	3:1	0.0
Mule-fat scrub	0.0	3:1	0.0
Coastal freshwater marsh	0.0	3:1	0.0
Pond	0.58	0:1	0.0
Disturbed habitat	0.15	0:1	0.0
Ornamental areas	1.79	0:1	0.0
Agriculture	11.25	0:1	0.0
Developed areas	2.20	0:1	0.0
Total Onsite impacts	19.68	--	2.71

* Includes mitigation acreage for impacts to non-grassland

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APPENDICES

APPENDIX A. PLANT SPECIES DETECTED ON THE FALLBROOK 21-ACRE PROPERTY

<u>Scientific Name</u>	<u>Common Name</u>
Dicots	
AIZOACEAE Fig-Marigold Family	
<i>Carpobrotus edulis</i>	Hottentot fig
ANACARDIACEAE Sumac Family	
<i>Malosma laurina</i>	laurel sumac
<i>Rhus integrifolia</i>	lemonadeberry
<i>Schinus molle</i>	Peruvian pepper tree
APIACEAE Carrot Family	
<i>Foeniculum vulgare</i>	fennel
APOCYNACEAE Dogbane Family	
<i>Nerium oleander</i>	oleander
<i>Vinca major</i>	greater periwinkle
ASTERACEAE Sunflower Family	
<i>Ambrosia psilostachya</i>	western ragweed
<i>Artemisia californica</i>	coastal sagebrush
<i>Baccharis pilularis</i>	coyote brush
<i>Baccharis salicifolia</i>	mule-fat
<i>Chrysanthemum coronarium</i>	garland daisy
<i>Gnaphalium</i> sp.	everlasting
<i>Hazardia squarrosa</i>	sawtooth goldenbush
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Hirschfeldia incana</i>	short-pod mustard
<i>Hypochaeris</i> sp.	cat's ear
BORAGINACEAE Borage Family	
<i>Pectocarya linearis</i>	slender pectocarya
BRASSICACEAE Mustard Family	
<i>Lobularia maritima</i>	sweet alyssum
<i>Sisymbrium</i> sp.	mustard
CACTACEAE Cactus Family	
<i>Hylocereus undatus</i>	dragon fruit
<i>Opuntia ficus-indica</i>	mission prickly-pear
CAPRIFOLIACEAE Honeysuckle Family	
<i>Sambucus mexicanus</i>	blue elderberry
CARYOPHYLLACEAE Pink Family	
<i>Cerastium glomeratum</i>	mouse-eared chickweed
CHENOPODIACEAE Goosefoot Family	
<i>Salsola tragus</i>	Russian thistle

APPENDIX A. PLANT SPECIES DETECTED ON THE FALLBROOK 21-ACRE PROPERTY

CONVOLVULACEAE Morning-Glory Family	
<i>Calystegia</i> sp.	morning-glory
CUCURBITACEAE Gourd Family	
<i>Marah macrocarpus</i>	wild cucumber
FABACEAE Pea Family	
<i>Erythrina</i> sp.	coral tree
<i>Lotus heermannii</i> var. <i>heermannii</i>	woolly lotus
<i>Lotus scoparius</i>	deerweed
<i>Lupinus</i> sp.	lupine
<i>Melilotus officinalis</i>	yellow sweetclover
FAGACEAE Oak Family	
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak
GERANIACEAE Geranium Family	
<i>Erodium cicutarium</i>	red-stem filaree
OLEACEAE Olive Family	
<i>Olea europaea</i>	olive
ONAGRACEAE Evening Primrose Family	
<i>Camissonia bistorta</i>	camissonia
<i>Camissonia californica</i>	false mustard
LAMIACEAE Mint Family	
<i>Salvia mellifera</i>	black sage
LAURACEAE Laurel Family	
<i>Avocado</i> sp.	avocado
MALVACEAE Mallow Family	
<i>Malva parviflora</i>	cheeseweed
PRIMULACEAE Primrose Family	
<i>Anagallis arvensis</i>	scarlet pimpernel
ROSACEAE Rose Family	
<i>Heteromeles arbutifolia</i>	toyon
RUTACEAE Rue Family	
<i>Citrus</i> sp.	orange
SALICACEAE Willow Family	
<i>Salix lasiolepis</i>	arroyo willow
SCROPHULARIACEAE Figwort Family	
<i>Keckiella cordifolia</i>	climbing bush penstemon
<i>Mimulus aurantiacus</i>	coast monkey flower

APPENDIX A. PLANT SPECIES DETECTED ON THE FALLBROOK 21-ACRE PROPERTY

SOLANACEAE Nightshade Family

Datura sp.

Jimson weed

Nicotiana glauca

tree tobacco

URTICACEAE Nettle Family

Urtica urens

dwarf nettle

Monocots

AGAVACEAE Agave Family

Agave americana

century plant

Yucca schidigera

our lord's candle

ARECACEAE Palm Family

Washingtonia robusta

Mexican fan palm

POACEAE Grass Family

Avena fatua

wild oat

Bromus diandrus

rip-gut grass

Bromus madritensis

foxtail chess

Nassella sp.

needlegrass

Poa annua

annual bluegrass

Polypogon monspeliensis

annual beard grass

TYPHACEAE Cattail Family

Typha domingensis

southern cattail

APPENDIX B. WILDLIFE SPECIES DETECTED ON THE FALLBROOK 21-ACRE PROPERTY

<u>Scientific Name</u>	<u>Common Name</u>	<u>No. Detected/Habitat</u>
Birds		
<i>Cathartes aura</i>	turkey vulture	1/OVER
<i>Buteo jamaicensis</i>	red-tailed hawk	1/OVER
<i>Buteo lineatus</i>	red-shouldered hawk	1/CLOW
<i>Zenaida macroura</i>	mourning dove	5/DEV
<i>Calypte anna</i>	Anna's hummingbird	2/DCSS
<i>Picoides nuttallii</i>	Nuttall's woodpecker	1/SWS
<i>Aphelocoma californica</i>	western scrub-jay	5/AG
<i>Corvus corax</i>	common raven	2/OVER
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	3/OVER
<i>Psaltirparus minimus</i>	bushtit	20/DCSS, ORN
<i>Troglodytes aedon</i>	house wren	2/DCSS
<i>Chamaea fasciata</i>	wrentit	1/DCSS
<i>Sialia mexicana</i>	western bluebird	3/AG
<i>Mimus polyglottos</i>	northern mockingbird	1/DEV
<i>Toxostoma redivivum</i>	California thrasher	1/DCSS
<i>Phainopepla nitens</i>	phainopepla	1/OVER
<i>Icterus cucullatus</i>	hooded oriole	3/ORN
<i>Carpodacus mexicanus</i>	house finch	20/DCSS, DEV
<i>Carduelis psaltria</i>	lesser goldfinch	5/DCSS, AG
Reptiles		
<i>Uta stansburiana</i>	side-blotched lizard	3/DCSS, AG, DEV
<i>Sceloporus occidentalis</i>	western fence lizard	2/ DCSS, DEV
Mammals		
<i>Sylvilagus audubonii</i>	Audubon's cottontail	3/DCSS, AG
<i>Spermophilus beecheyi</i>	California ground squirrel	5/DCSS, AG, ORN
Habitats		
AG	Agriculture	
CLOW	Coast live oak woodland	
DCSS	Diegan coastal sage scrub	
ORN	Ornamental	
OVER	Overhead	
SWS	Southern willow scrub	
DEV	Developed	

APPENDIX C. NCCP EVALUATION LOGIC FLOWCHART FOR THE FALLBROOK 21-ACRE PROPERTY

1. Natural Land: Is natural vegetation present? **Yes.**
2. CSS: Is CSS present? **Yes.**
3. Large size: Is land most dense CSS in subregion? **No.** Dense areas of Diegan coastal sage scrub occur outside of the property boundaries.
4. Proximity: Is land close to Higher Value District? **No.** Areas of Diegan coastal sage scrub in the vicinity of the property are remnants of what were once more expansive areas of coastal sage scrub. These areas currently consist of small areas of coastal sage scrub that are isolated from other patches of coastal sage scrub by agriculture and disturbed habitat.
5. Linkage: Is land located in a corridor between Higher Value Districts? **No.** Diegan coastal sage scrub occurring along the eastern property boundary could be considered a wildlife corridor. However, this corridor does not provide connectivity between areas of high quality Diegan coastal sage scrub.
6. Species: Are there significant populations of target or endemic species? **No.** The potential for occurrence of sensitive species within the property is considered low due to the small size of areas of coastal sage scrub occurring within the property.

Based on the NCCP Logic Flowchart, the quality of the habitat occurring within the project area is defined as "Lower Potential Value for Long-Term Conservation". Thus, development, with adequate mitigation is allowed.